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REMARKS

This application has been carefully reviewed in light of the Office Action dated June 22, 2006. Claims 1 to 3, 5 to 8 and 10 to 13 are pending in the application, with Claims 4, 9 and 14 having been cancelled. Claims 1 to 3, 5 to 8 and 10 to 13 have been amended and Claims 1, 3, 5 and 11 to 13 are in independent form. Reconsideration and further examination are respectfully requested.

In the Office Action, Claims 1 to 7 and 11 to 14 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,525,888 (Toya); and Claims 8 to 10 were rejected under 35 U.S.C. § 103(a) over Toya in view of U.S. Patent No. 5,631,677 (Horigome). Reconsideration and withdrawal are respectfully requested.

Claims 1, 5, 11 and 13

Independent Claim 1 as amended is directed to an electric charging apparatus for charging a secondary battery that is held in the apparatus and being attachable/removable to/from a printer main body, the printer being driven by electric power from the secondary battery. The apparatus includes a communication unit configured to perform communication with the printer, and determination means for determining an electric charging condition for electrically charging the secondary battery. The apparatus also includes control means for controlling electric charging of the secondary battery in accordance with an electric charging control signal for the secondary battery, transmitted via the communication unit from the printer in correspondence with a state in which a print head of the printer is capped, and the electric charging condition determined by the determination means.

Independent Claim 5 as amended is directed to a printer, which an

electric charging unit including a secondary battery is attachable/removable to/from, and which can be operated with electric power supply from the secondary battery included in the electric charging unit. The printer includes a communication unit configured to perform communication with the electric charging unit, and transmission control means for transmitting an electric charging control signal for the secondary battery to the electric charging unit via the communication unit, in a case that a print head of the printer is capped.

Independent Claim 11 as amended is directed to an electric charging control method in an electric charging apparatus for charging a secondary battery that is held in the apparatus and being attachable/removable to/from a printer main body, the printer being driven by electric power from the secondary battery. The method includes a supply step of supplying the electric power from the secondary battery to the printer, and a determination step of determining an electric charging condition for electrically charging the secondary battery. The method also includes a reception step of receiving an electric charging control signal for the secondary battery from the printer, in correspondence with a state of the printer. In addition, the method includes a control step of controlling electrically charging of the secondary battery in accordance with the electric charging control signal received in the reception step and the electric charging condition determined in the determination step.

Independent Claim 13 as amended is directed to an electric charging control method of a printer, which an electric charging unit including a secondary battery is attachable/removable to/from, and which can be operated with electric power supply from the secondary battery included in the electric charging unit. The method includes a transmission control step of periodically transmitting an electric charging control signal for the secondary battery to the electric charging unit, in a case where a state of the printer is a

predetermined state. The method also includes a step of changing a status of the electric charging control signal and transmitting the electric charging control signal whose status is changed to the electric charging unit, in a case where the state of the printer is changed from the predetermined state to another state.

A feature of the invention of Claims 1, 5, 11 and 13 therefore lies in transmitting (or receiving) an electric charging control signal for a secondary battery from a printer, in correspondence with a state in which a print head of the printer is capped (or a state of the printer). The applied references of Toya and Horigome are not seen to disclose or suggest at least this feature.

As understood by Applicant, Toya discloses an integrated system of battery charger, battery case and an electronic equipment. See Toya, Abstract. A microcomputer 43 of a battery charger 30 controls charging based on battery temperature and determines battery capacity and voltage based on a current detected by a current detection means. Further, the microcomputer 43 shares battery information such as battery voltage and capacity with a portable telephone 10. See Toya, column 4, line 66 to column 5, line 7. The microcomputer 43 sends battery information such as the remaining battery capacity and voltage to the portable telephone 10. See Toya, column 5, lines 16 to 27.

However, Toya is not seen to disclose or suggest transmitting (or receiving) an electric charging control signal for a secondary battery from a printer, muchless that such transmission (or receipt) of the electric charging control signal is in correspondence with a state in which a print head of the printer is capped (or a state of the printer).

In addition, Horigome has been reviewed and is not seen to compensate for the deficiencies of Toya.

Allowance of Claims 1, 5, 11 and 13 is therefore respectfully requested.

Claims 3 and 12

Independent Claim 3 as amended is directed to an electric charging apparatus for charging a secondary battery that is held in the apparatus and being attachable/removable to/from a printer main body, the printer being driven by electric power from the secondary battery. The apparatus includes supply means for supplying the electric power from the secondary battery to the printer, and reception means for receiving a signal from the printer. The apparatus also includes charge control means for starting electric charging of the secondary battery in a case where a condition for electric charging the secondary battery is satisfied, when it is instructed by the signal received by the reception means to turn off the printer. In addition, the apparatus includes control means for stopping electric power supply from the secondary battery by the supply means, after completion of the electric charging of the secondary battery by the charge control means.

Independent Claim 12 as amended is directed to a method which is seen to generally correspond with Claim 3.

Thus, among its many features, the invention of Claims 3 and 12 provides for (i) starting electric charging of a secondary battery in a case where a condition for electric charging the secondary battery is satisfied, when it is instructed by a signal received from a printer to turn off the printer, and (ii) stopping electric power supply from the secondary battery to the printer, after completion of the electric charging of the secondary battery. The applied references of Toya and Horigome are not seen to disclose or suggest at least these features.

As noted above, Toya is seen to disclose that a microcomputer 43 of a battery charger 30 controls charging based on battery temperature and determines battery capacity and voltage based on a current detected by a current detection means.

However, nothing in Toya is seen to disclose or suggest starting electric charging of a secondary battery in a case where a condition for electric charging the secondary battery is satisfied, when it is instructed by a signal received from a printer to turn off the printer. Moreover, Toya is not seen to disclose or suggest stopping electric power supply from the secondary battery to the printer, after completion of the electric charging of the secondary battery.

In addition, Horigome has been reviewed and is not seen to compensate for the deficiencies of Toya.

Allowance of Claims 3 and 12 is therefore respectfully requested.

Accordingly, based on the foregoing amendments and remarks, independent Claims 1, 3, 5 and 11 to 13 as amended are believed to be allowable over the applied references.

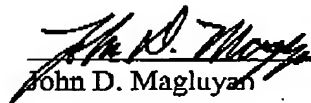
The other claims in the application are each dependent from the independent claims and are believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

Regarding a formal matter, it is respectfully requested to receive an initialed copy of the Form PTO-1449 that was submitted with the Information Disclosure Statement dated September 23, 2004. Although a copy of this Form PTO-1449 was returned with the Office Action, that copy was not initialed.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,


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